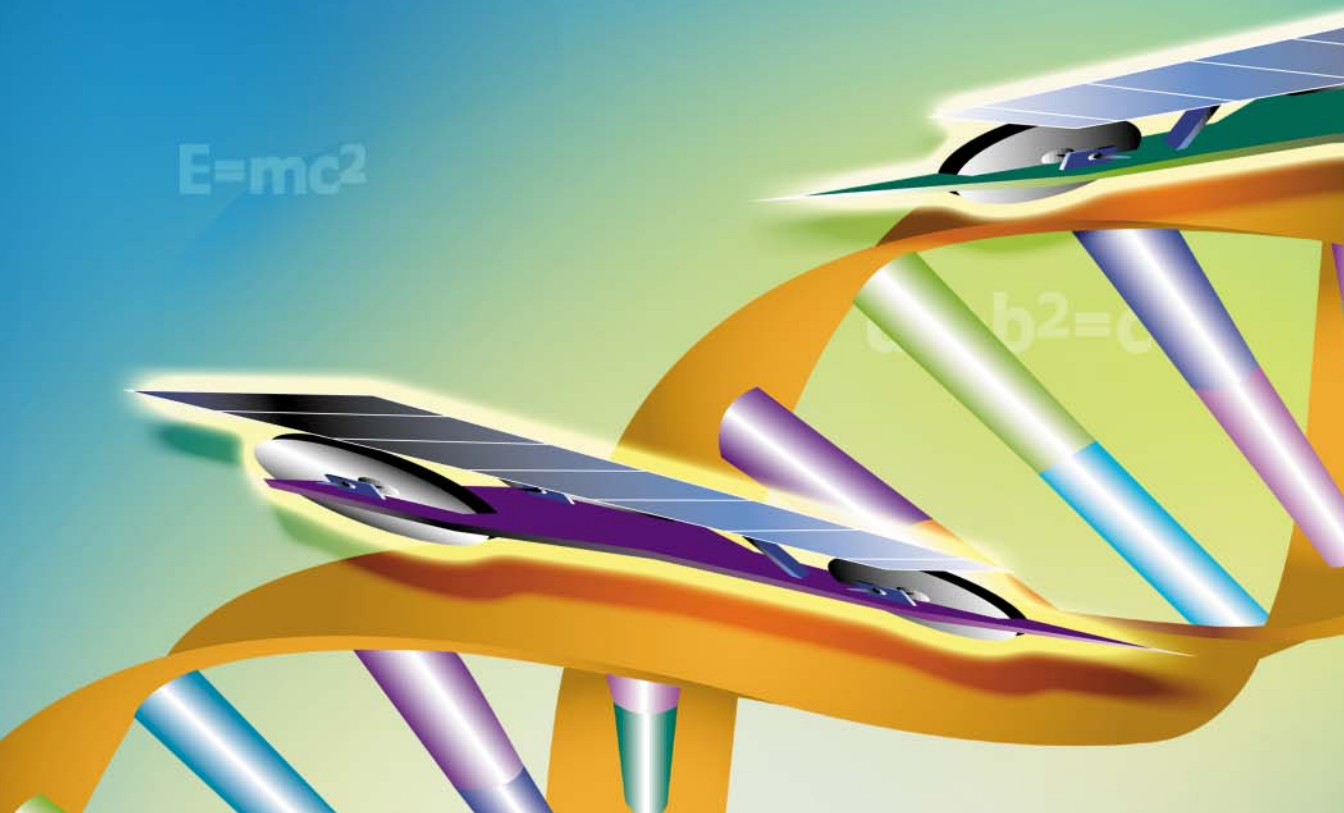
TEST/DRIVE
the Science Highway . . .

2003 Middle School Science Bowl

June 27 – 29, 2003



Introduction

The U.S. Department of Energy has sponsored the National Science Bowl® for thirteen years. Since its inception, more than 80,000 high school students have participated in this fast paced question and answer competition. Last year, the Department of Energy Office of Science piloted a Science Bowl for middle school students. There were seven regional competitions with the winning teams of those regional events participating in the National middle school finals in Washington, D.C., March 21-23, 2002. In 2002, 140 teams participated in seven regional competitions throughout the nation. The event included a day of academic competition and a day of "hands-on" science and engineering when the teams designed, built, and raced model solar cars. Awards were given for both the academic and "hands-on" competitions. The responses from students and teachers were overwhelmingly positive to continue with this middle school event.

This year, the Office of Science is expanding the program to include 16 teams. The National event, scheduled for June 25-28, 2003, in Golden, Colorado, will be hosted by the National Renewable Energy Laboratory (NREL) and co-sponsored by General Motors. NREL is the premier laboratory for renewable energy and energy efficiency research and development, and the finals will include a number of educational enrichment activities unique to NREL and GM.

There are two competitions at the Middle School Science Bowl – an academic math and science competition and a model solar car competition. The academic competition is a fast-paced question-and-answer contest where students answer questions about earth science, physical science, life science, math, and general science. The model solar car activity challenges students to design, build, and race model solar cars. Teams are given car components to construct their solar cars on site during the event.

Any current public, private, or home school student is welcome to form a team and participate in the regional Middle School Science Bowl and/or Junior Solar Sprint event. The regional champions from participating sites receive an all-expense paid trip to Golden, Colorado to participate in the national event.

Dr. Raymond L. Orbach

Department of Energy
Office of Science
Washington, DC 20585

Office of the Director

June 25, 2003

Welcome to the National Middle School Science Bowl and to Golden, Colorado, home of the National Renewable Energy Laboratory. I extend a special thanks to the parents, teachers and volunteers who made this educational opportunity available to these extraordinary students.

This is the second year that the U.S. Department of Energy's Office of Science is sponsoring a national middle school competition. We hope this experience will encourage you to continue your science studies and participate in the National Science Bowl® in your high school years. The national high school competition is currently in its thirteenth year and has played a role in inspiring many students to pursue science and math fields in college and to participate in scientific research.

The Department of Energy has a long history of supporting famous scientists and their research at colleges, universities and our National Laboratories. Many Nobel award-winning scientists have performed their research at these labs because of the unique instruments and scientific talent they attract. The Office of Science builds and operates powerful, giant, machines that allow scientists to observe the behavior of the smallest things in the universe. You might have seen these nuclear particle accelerators featured in magazines like *National Geographic* or on the *Discovery* channel. The successful design, building and operation of these machines depends on the cooperation of hundreds of teams made of scientists, engineers, mathematicians and technicians.

Although these instruments of science are impressive accomplishments, they are not the most important. The most important and impressive things we can build are great minds. You are the great minds that will make our future brighter and full of wonderful possibilities. Good luck, and I hope the Science Bowl plays a positive role in attracting you to a career in the exciting world of science.

Raymond L. Orbach

General Motors
Environment & Energy

ELIZABETH A. LOWERY
Vice President

June 28, 2003

Welcome to the first National Middle School Science Bowl. General Motors is pleased to be co-sponsoring the event with the U.S. Department of Energy and NREL to foster enthusiasm for learning about science and technology.

For many years, GM has supported a strong and diverse base of internal and external environmental, energy and technology education programs for children in kindergarten through twelfth grades. Recently, GM joined with Weekly Reader, the nation's leading classroom periodical, to launch "Fuel Cells: Driving the Future," a free educational program distributed to schools nationwide that teaches fifth through eighth grade students about how hydrogen fuel cells are being developed to meet future energy needs.

I'd like to invite you to visit GM's interactive website, with a special section for students in grades 5-8, which explores environment, science and technology with fun and educational themes. Visit it at: http://gm.com/company/gmability/edu_k-12/index.html. You might even get some help with your homework on the site!

It is important to involve young minds, like yours, in the process of finding answers to questions facing the world. Your participation now will go a long way toward finding workable solutions to future challenges.

Good luck and have fun!

Elizabeth A. Lowery

Elizabeth A. Lowery
Vice President
Environment & Energy

Beth Lowery

2003 Middle School Science Bowl

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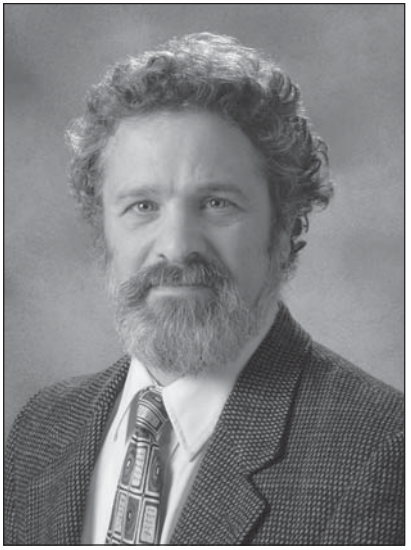
Guest Speaker
Peter Faletra



Dr. Peter Faletra is currently directing the education and workforce development programs for the Office of Science (SC) and is head of the office for Workforce Development for Teachers and Scientists. This office provides a variety of internships and fellowships at Department of Energy (DOE) National Labs including Argonne, Brookhaven, Lawrence Berkeley, Oak Ridge, National Renewable Energy Laboratory, and Pacific Northwest National Labs. These programs are aimed at increasing the number of students choosing science and technology careers in the DOE, National Laboratories and private sector research institutions.

Dr. Faletra has worked in SC education efforts for four years. Before coming to DOE, he worked as an educator in various colleges, universities and secondary schools. Dr. Faletra also owned a successful biotechnology corporation, worked professionally as an x-ray systems designer, biological consultant in immunology, musician, and general contractor.

Dr. Faletra received his B.A. in Biological Sciences at Northeastern University in 1975, his M.S. degree in Biological Sciences from the University of Massachusetts in 1978, and a Ph.D. from Boston University in 1983. In both his M.S. and Ph.D., Dr. Faletra researched mammalian stem cells.

Dr. Faletra has received numerous education awards, including the Albert Einstein Distinguished Educator Award. He has also mentored some of the most successful science students in the country and has won a number of awards in recognition of his mentoring activities. Dr. Faletra was born and raised in Boston, Massachusetts.

Guest Speaker
Kristin Zimmerman

Dr. Kristin Zimmerman has been with General Motors since 1995. Her current assignment is Manager of GM's Energy & Global Climate Change Issues Team. While at General Motors, Kristen established the GM Global Satellite Laboratory Network, conducted research in the area of advanced lightweight composite primary structures for "Next Generation Vehicle" applications, and created a computer based software package to analyze the impact of new advanced technology vehicles.

Kristin received her Ph.D. in Engineering Mechanics in 1993 from Michigan State University. During her Ph.D. research project, she designed two novel approaches to composite joining and repair and has received one patent from this research.

She is a member of several professional societies including American Society of Mechanical Engineers, Society for Experimental Mechanics, and the Society of Automotive Engineers.

Guest Speaker
Kenneth D. Cameron (Colonel, USMC retired)

Kenneth D. Cameron is currently Program Executive in General Motors' (GM) Fuel Cell Commercialization Activities. Prior to this appointment, Cameron was Director of GM's Software Vehicle Innovation Program, and Director of GM's WWP Supplier Technology Acquisition. Cameron joined GM as the Executive Director of Hughes Training, leading a team in space shuttle and space station simulator development. He subsequently held the position of Vehicle Line Executive for the Saab 9-3 automobile, living in Sweden for two years.

Before coming to GM, Cameron served as a NASA Astronaut and Colonel in the U.S. Marine Corps. Cameron became an astronaut in June 1985. A veteran of three space shuttle flights, Cameron has logged over 561 hours in space. He served as pilot of Atlantis on STS-37 (1991), a mission to deploy the Compton Gamma Ray Observatory, and was the spacecraft commander of Discovery on STS-56 (1993), an environmental monitoring mission to measure ozone and CFC levels in the upper atmosphere. Cameron flew again as spacecraft commander of Atlantis on STS-74 (1995), an international cooperative mission and the first flight to use the shuttle in building a space station, testing techniques for future missions. Prior to his last space shuttle flight to the Russian space station Mir, Cameron was assigned for one year to the Gagarin Cosmonaut Training Center outside Moscow, Russia.

A former enlisted Marine and infantry officer, Cameron served for one year in the Republic of Vietnam as an infantry platoon commander before beginning flight training in Pensacola, Florida. After assignment as an attack pilot flying A-4 skyhawks and educational postings, he was assigned for one year flying in Japan, Korea, and the Philippines.

Cameron holds a Bachelor's degree in aeronautics and astronautics from the Massachusetts Institute of Technology (MIT), a Master's degree in aeronautics and astronautics from MIT, and a Master's degree in Business Administration from Michigan State University.

2003 Middle School Science Bowl Facilities Hosting Regional Events

Alabama
1. Alabama School of Math & Science

California
2. NOBCChE, San Diego Chapter

Colorado
3. National Renewable Energy Laboratory

Florida
4. Florida Solar Energy Center

Illinois
5. Argonne National Laboratory

Indiana
6. SAE JSS, Indiana Chapter

Iowa
7. West Branch Middle School

Michigan
8. NOBCChE, Detroit Chapter

New Jersey
9. TransOptions, Inc.

New Mexico
10. Sandia National Laboratories

North Carolina
11. North Carolina EV Challenge

Oregon
12. Bonneville Power Administration

Texas
13. BWXT Pantex Plant
14. San Antonio, Texas
15. Texas A&M University

Washington
16. Bonneville Power Administration

U.S. Department of Energy
National Middle School Science Bowl
June 25, 2003 – June 28, 2003

National Renewable Energy Laboratory/Colorado School of Mines
Golden, Colorado

Schedule of Events

Wednesday, June 25, 2003
Arrival and Orientation

Welcome and Solar Car Construction

Location:	Colorado School of Mines 600 Maple Street Golden, Colorado (303) 273-3926
Dress:	Casual
1:00 – 3:45 p.m.	Registration – *Weaver Towers*
3:45 – 4:45 p.m.	Welcome Assembly/Agenda & Solar Car Rules Review (teams and coordinators) - *Student Center Ballrooms A and B* Opening Remarks: Peter Faletra, DOE Office of Science, Kristin Zimmerman, General Motors Agenda/Code of Conduct/Solar Car Review: Linda Lung, National Renewable Energy Laboratory, Cindy Musick, DOE Office of Science
5:00 – 5:40 p.m.	Dinner – *Student Center Dining Room*
5:45 – 6:15 p.m.	Speaker, Ken Cameron, General Motors – *Student Center Ballrooms B and C*
6:30 – 10:00 p.m.	Solar Car Competition Workshop: Building A Solar Car (students only) – *Student Center Ballrooms A, B, and C*
6:30 – 10:00 p.m.	National Earthquake Information Center and CSM Geology Museum (teachers and coordinators)
10:30 p.m.	Curfew – all participants must be in their rooms

Thursday, June 26, 2003
Building and Racing Model Solar Cars

Dress:	Casual Attire-National Middle School Science Bowl T-Shirt
7:00 – 8:00 a.m.	Breakfast – *Student Center Dining Room*
8:30 – Noon	Building model solar cars (students only) – *Student Center Ballrooms A, B, and C*
8:30 – Noon	Fuel cell teacher workshop (teachers and coordinators) – *Student Center Ballrooms D and E*
8:30 – Noon	Hands-on Science Activity (extra students only) – *Student Center Room 236*
12:00 – 1:00 p.m.	Lunch – *Student Center Dining Room*
1:00 – 2:00 p.m.	Finish building model solar cars / Teacher workshop continues / hands-on science activity
2:00 – 4:00 p.m.	Model solar car races – *Student Center Intramural parking lot*
4:00 – 5:00 p.m.	Students return to Ballrooms A, B, and C for clean up
5:00 – 6:00 p.m.	Dinner – *Student Center Dining*
6:00 – 7:00 p.m.	Rules review for the academic competition (teams and coordinators) – *Student Center Ballrooms A, B, and C* Michelle Rathbun and Cindy Musick, DOE Office of Science
7:00 – 10:00 p.m.	Hospitality time and ice cream social for teams (students and coaches) – *Student Center Recreation Center*
7:00 – 10:00 p.m.	Regional coordinators meeting – *Student Center Room 236*
10:30 p.m.	Curfew – all participants must be in their rooms

Friday, June 27, 2003
Academic Competition

Dress:	Business Attire
7:00 – 8:00 a.m.	Breakfast – *Student Center Dining Room*

Round Robin Matches

8:30 a.m.	Round One
9:00 a.m.	Round Two
9:30 a.m.	Round Three
10:00 a.m.	Refreshment Break – *Front foyer of Alderson Hall*
10:30 a.m.	Round Four
11:00 a.m.	Round Five
11:30 a.m.	Round Six
12:00 p.m.	Round Seven
12:30 – 1:15 p.m.	Lunch – *Student Center Dining Room*
1:15 p.m.	Drawing for 8-team single elimination – *Alderson Hall*
1:30 p.m.	Round One – *Alderson Hall*
2:00 p.m.	Round Two – *Alderson Hall*
2:30 p.m	Round Three – *Alderson Hall*
3:00 p.m.	Round Four – *Student Center Ballrooms D and E*
3:30 p.m.	Round Five – *Student Center Ballrooms D and E*
4:00 – 5:00 p.m.	Presentation of Awards - *Student Center Ballrooms A, B, and C*
5:00 – 6:00 p.m.	Dinner – *Student Center Ballrooms A, B, and C*
6:00 – 6:30 p.m.	Teams to Weaver Towers to change into casual attire
6:30 p.m.	Teams and coordinators board buses at Weaver Towers to depart to the National Renewable Energy Laboratory
7:00 – 9:30 p.m.	Science Activity
9:30 p.m.	Teams and coordinators board buses at NREL to depart to Colorado School of Mines
10:30 p.m.	Curfew – all participants must be in their rooms

Saturday, June 28, 2003

Farewell to All

7:00-8:00 a.m.	Breakfast – *Student Center Dining Room*
8:30-11:30 a.m.	Teams check out: Includes turning in keys and meal cards at Weaver Towers. Teams board buses at Weaver Towers to depart for Denver International Airport

Albuquerque Academy / Albuquerque, NM

Sandia National Laboratories

Left to right: Ann Dominic, Arjune Bose, Tommy Martin, Ronald Shaw, and Ann Atura from the Albuquerque Academy

Team Coaches: **Kevin Fowler** received a B.S. in agriculture from New Mexico State University and is completing a M.S. in Teaching from New Mexico Tech. As a project manager for the remodeling of the Albuquerque Academy, Kevin was asked to teach a horticulture class and he quickly became hooked on teaching. The three scientific discoveries that are most relevant to his work are natural selection, transposable elements, and the germ theory. Kevin enjoys taking care of a small orchard and vineyard in his spare time. **Rhonda Spidell** has been teaching middle school students for over twenty years, the last 12 at Albuquerque Academy. She thinks teaching is the very best job you can have, because you are always learning something new, especially when you have students like our Science Bowl participants. She enjoys all outdoor activities, including hiking, exploring geological formations, and looking for fossils.

Team Members: **Ann Atura** has a dog named Hazel and a sister who will attend the University of Pennsylvania in the fall. She is a vegetarian whose favorite ice cream is vanilla with rainbow sprinkles. Ann participates in Science Olympiad and received a fourth place medal at the national competition. **Arjune Bose** loves math and science. He has participated in MathCounts, AMC 8, AMC 10, Mandelbrot, and UNM-PNM math contests. He loves Science Bowl and hopes to go to nationals in high school. **Ann Dominic** is an eighth grader whose favorite subject is science in any form. She was the winner of the regional science fair competition during third grade and the Louisiana state competition in fourth grade. This year, the team was the winner in the Regional and State Science Olympiad tournament. Ann won first place in the acoustic event and the astronomy event. **Thomas Martin** participated in the Middle School Science Bowl last year and has also competed in the National Science Olympiad Tournament. Tommy is also a swimmer. **Ronald Shaw** likes to play tennis and read books. He is going to the National Scripps Howard spelling bee. His favorite subjects are math, science, history, and English.

Andrew Jackson Middle School / Titusville, FL

Florida Solar Energy Center

Left to right: Jared Cunio, Ashley Miskovitz, Jessica Lowe, Amanda Regan

Team Coach: **Ruth Clifford** has been teaching at Andrew Jackson Middle School for the past twelve years. She believes that every student can learn, but they are more likely to remember if they put what they learn into hands-on practice. "I most enjoy seeing the students discover things about science in the labs that we do and in developing experiments to take to the science fair." Ms. Clifford was awarded her area's 1999 Exemplary Science Teacher Award given by the Space Coast Science Education Alliance.

Team Members: **Jared Cunio**, eighth grader, is involved in Orchestra, Science Research and Cover-to-Cover, the school's bookstore. He also takes gymnastics classes and is a member of the Titusville Swim Team. Jared's favorite subjects are science and math; he likes math because it is the most logical subject. He also enjoys reading, and plans to study geology in college. **Jessica Lowe** is an eighth grader who is involved in Christ on Campus and the YA Café Reading Club. Some of her hobbies are making beaded bracelets, painting, and sewing. Jessica also enjoys swimming. This summer, she will be participating in cheerleading. **Ashley Miskowitz** is an eighth grader who enjoys science research, reading, and sports, such as basketball and soccer. She is also a member of the National Junior Honor Society. When she grows up, she wants to be a physician or a pediatrician. **Amanda Regan**, eighth grader, is in Science Research in school and does community service in her neighborhood. Her favorite subject in school is math. Amanda's future goals are to become a veterinarian or a professional rally race car driver.

Auburn Junior High School / Auburn, AL

Alabama School of Math & Science

Left to right, front row: Valerie Henry, Leigh Smalley, Dr. Jane Ellis (President/Director), Back row: Dr. Garvin Wattuhewa (Coordinator), Steve Owen (Coach), Rebecca Williams, Peter Wang, Doug Crandell

Team Coach: **Steve Owen** has taught science at Auburn Jr. High for 10 years. He is the schools cross-country coach, Science Olympiad coach and science bowl coach. The science Olympiad team has won the State championship the past 6 years. He enjoys running and fishing. Steve is married and has a 4 month old daughter and a 3 year old son.

Team Members: **Doug Crandell**, eighth grader, enjoys studying science and social studies, and is very interested in geology. He enjoys playing soccer and practicing trumpet. Doug is also involved in Science Olympiad and National Junior Honor Society. **Leigh Smalley** is an eighth grader who likes to sing, write songs, and play guitar and piano. She also is a cheerleader, and loves tumbling. She enjoys going to the pool and hanging out with friends. She was president of National Junior Honor Society, was in Builder's Club and Student Council, played Annie in our school musical *Annie Jr.*, was on Science Olympiad, and participated in church activities. **Peter Wang**, eighth grader, likes going to Band and Social Studies. His hobbies are soccer, reading, video and computer games, and baseball cards. He is also interested in professional and collegiate sports and history. He is involved in Science Olympiad, Jazz Band, Marching Band, Math Counts, Stock Market Club, National Junior Honor Society. Peter has lived in Belgium and he plays the alto saxophone. **Rebecca Williams**, eighth grader, likes playing piano, swimming, babysitting, and running (cross-country and track). Her favorite subjects are science and math. She is active in church youth group, church choir, Spanish club, and Junior Honor Society. She also lived in Australia for seven years.

Bell/North Valley Middle Schools / Golden, CO

National Renewable Energy Laboratory

Left to right: Bell Middle School, John White (Coach), Katrina Gabel, Michelle Beehler, John Kersten (Manager of DOE Golden Field Office), North Valley Middle School, Alex Schneider, Stephen Wakefield, Heidi Sedinger (Coach)

Team Coaches: **Heidi Sedinger** teaches earth science. She earned a M.S. in Teaching Integrated Natural Sciences from Colorado College and a B.S. in Elementary Education and Social Sciences from the University of Northern Colorado. Her father, a fisheries biologist, encouraged her love of science. The three most important discoveries are the wheel, antibiotics, and electricity. She enjoys reading, scrapbooking, playing tennis, gardening, and spending time with her husband, also a middle school science teacher, and three year old twin boys. **John White** received his B.S. in Geology from the University of Wyoming and a M.S. in Education from the University of Denver. John worked for 14 years in the Petroleum Geology field and now works as a Geologic Consultant during the summer. John has taught science for nine years. The three most important discoveries are inoculation for disease, plate tectonic theory, and semiconductor technology.

Team Members: **Michelle Beehler**, eighth grader, loves the mountains and nature, soccer and tennis. She has been involved in Student Council since elementary school and was president in sixth grade. She hopes to be a valedictorian and wants to go to a great college that will prepare her for life. **Katrina Gabel,** eighth grader, goes by "Trina." She has played soccer since she was 4 years old, and is currently on a team called "Table Mountain Ice." She also enjoys snow and water skiing. She is active in church youth group, and West Side Dance competition group. Her favorite subject is American History. Trina plans to go to college and either work with kids, become a teacher, or be an interior designer. **Alex Schneider**, seventh grader, is involved in MathCounts, MESA, National Junior Honor Society, and Brain Bowl. His favorite hobby is basketball and his favorite subject in school is math. **Stephen Wakefield** is a seventh grader, who enjoys playing sports and video games. His interests are mostly in science fiction. He plays the trombone and is involved at church. Stephen participates in Brain Bowl, MathCounts, and MESA. His favorite subject is math, and his future plans are to become an astronaut.

College Station Middle School / College Station, TX

Texas A&M University

Left to right, back row: Cathy Berry (coach), Brian Liu, Alex Liu, and Sean Lau, Front row: Jeffrey Chen and Becca Yasskin

Team Coach: **Caroline Jones** has been teaching eighth grade math for eight years. She enjoys church activities, quilting, learning Chinese, and learning to play the violin. Caroline is the MathCounts coach and sponsors the chess club.

Team Members: **Sean Lau** is an eighth grader whose favorite subject changes back and forth between math and science. In addition to science bowl, Sean has participated in MathCounts, chess club, and UIL academic competions. He plays the violin in the orchestra and plays soccer as well. Sean's favorite number is pi. **Alex Liu** is a seventh grader whose favorite subject is science. Besides science bowl, Alex has also participated in MathCounts, UIL academic competitions, chess club, and tennis. He plays violin in the orchestra. Alex enjoys playing StarCraft and Diablo II. **Brian Liu** is an eighth grader whose favorite subject is math. Besides science bowl, Brian has participated in MathCounts, UIL academic competitions, chess club, and tennis. He plays in the orchestra, where he is first chair violin. He likes to read and draw hedgehogs. **Becca Yasskin** is a seventh grader who enjoys all subject and cannot choose one as her favorite. In addition to science bowl, Becca is involved in MathCounts, the robotics competition, theater arts, and Spanish. Becca can build amazing things with a set of polydrons, including a stellated icosahedron and a model of the Buckey Ball.

Crockett Middle School / Amarillo, TX

BWXT Pantex Plant

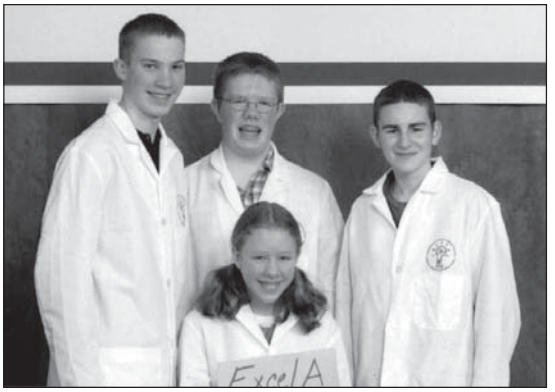
Left to right: David Martindale (alternate), Charlie Gonzales, Wrather McGinnis, Marcella Herrington (Coach), Joe Bufford, Will Brown

Team Coach: Coach **Marcella Herrington** was born in Texas and attended Southwestern University in Georgetown, Texas, where she received a double major in art and biology. She earned her masters degree from Sul Ross State University. She has been a teacher for 33 years, teaching art and almost every science subject. Mrs. Herrington enjoys reading, gardening, foreign travel, hiking, mountaineering, and snowshoeing. She is married and has two adult children and two grandchildren.

Team Members: **Will Brown**, an eighth grader, was born in Oklahoma City, but moved to Texas when he was three years old. Will enjoys skating and writing. **Joe Bufford**, an eighth grader, loves being involved in extracurricular activities. His favorite classes are algebra and band. Joe enjoys listening to music and playing the trombone. His other favorite pastime is sleeping. **Charlie Gonzales**, an eighth grader, was born on Andrews Air Force Base near Washington, D.C. He enjoys riding his bike, playing video games, and reading. He is looking forward to high school and would like to participate on teams like Science Bowl and MathCounts. **David Martindale** is an eighth grader. His favorite subject is algebra and his favorite pastime is reading. He also enjoys competing in Science Bowl. **Wrather McGinnis**, an eighth grader, plays the guitar and enjoys competing in Science Bowl.

Excel Academic League / Vancouver, WA

Bonneville Power Administration



Left to right: Kelvin Crockford, James Williams, Jeremy VanGelder, Front: Kirsten Williams

Team Coach: **Ann Williams** received her degree in Electrical Engineering from Brigham Young University. She and her husband, Craig, are the parents of six children. They educate their children at home. Ann is the coach for the Math Olympiad and MathCounts teams and helps on the Science Olympiad team. She volunteers at Church and enjoys gardening, going on field trips, and family history.

Team Members: **Kelvin Crockford** is a homeschooled eighth grader. His favorite subjects are history and science. His extracurricular activities include Science Olympiad, Community Education Basketball, and a father-son group called Contenders for the Faith. During his spare time, he enjoys working with wood in his grandpa's shop. **Jeremy VanGelder** is involved in several academic contests including Science Olympiad, Science Bowl, Word Power Challenge and Math Olympiad. He enjoys reading, riding go-carts and motor cycles and long arduous "hikes." When not doing that, he is homeschooling or doing other similar activities. **James Williams** is an eighth grade homeschooler. His favorite subjects are math and science. He has participated in Science Olympiad for five years and has gone to the State Geography Bee twice. Math Olympiad and MathCounts also keep him busy. James is a Boy Scout, plays piano, and enjoys computer programming. He is the webmaster for ExCEL. He hopes to become a physicist. **Kirsten Williams** is a seventh grade homeschooler. She competes in Science Olympiad, National Geographic Geography Bee, and Math Olympiad. Kirsten enjoys swimming, running, drawing, piano, and bird watching. She participated in an archeological dig and enjoys studying fossils. She would like to become a Marine Biologist, Ornithologist, or Storm Chaser.

Halstead Middle School / Newton, NJ

TransOptions, Inc.

Left to right, back row: James Hofmann (Coach) and Paul Campana (Coach); Front row: Steven Dunlap, Kevin Campana, Marshall Dix, and David Suriano

Team Coaches: **James Hofmann** has been a teacher of Technology for nine years. He was a custom furniture and cabinet-maker who went back to the classroom. Coach Hofmann is also a volunteer fireman in Newton, a Boy Scout assistant leader in Troupe 184, and League Administrator and founder of the Newton Hockey Program, an Inline roller hockey program sanctioned by U.S.A. Hockey since 1995. He is married to Amanda, and they have two children, Justin, 12, and Samantha, 9. His hobbies include radio-controlled aircraft, stamps, coins, trading cards, lacrosse and ice hockey. **Paul Campana** is a self-employed ceramic tile contractor from Newton, New Jersey. He is married and has three wonderful young boys. Being a Cub Scout leader and soccer coach are among his favorite pastimes.

Team Members: **Kevin Campana** is an eighth grader whose hobbies are building car models, building tree houses, collecting baseball cards, and doing anything that has to do with power tools. He has already made a tree house and is now currently working on a second one. Every spring and fall, he plays soccer on one of the best recreational soccer teams in the county. Soccer is his favorite sport, and he plays whenever he gets the chance. **Marshall Dix**, eighth grader, was born in Pennsylvania, raised in Florida, and moved to Newton this school year. His interests are the unsolved mysteries of science and building, designing, creating, and inventing. He was the chief architect of the "Rolling Wedge" which will compete in Springfield, Massachusetts. **Steven Dunlap** is an eighth grader who can fix anything. He enjoys building great things out of nothing, nitro-powered R/C cars, and baseball. **David Suriano**, eighth grader, moved to Newton only seven months ago. He has built many creations out of Legos, and actually created an airplane out of Legos that can fly. He has created several inventions and numerous crazy ideas still on the drawing board. David enjoys building and working on the computer.

Inza R. Wood Middle School / Wilsonville, OR

Bonneville Power Administration

Left to right, back row: Jeff Lewis, Dane Bennington, Ross Hansen, Karoline Kassmann (Coach), front row: Zachary Kline, Rebekah Reitmeyer

Team Coach: **Karoline Kassmann** has taught eighth grade science for 6 years. Combining teaching with her passions for climbing and being outdoors, Karoline loves visiting the places she teaches about in her Earth science classes. She is a photographer, who enjoys gardening, traveling, and improving her Spanish. Two significant discoveries in science are: the structure and composition of DNA and completion of the human genome project; and space travel and exploration.

Team Members: **Dane Bennington**, eighth grader, is an avid fan of aviation. He builds model and designs airplanes, both electric and fuel powered, and has been working to master his electric helicopter. This summer he will start flying lessons in full scale aircraft. In Boy Scouts, he has achieved the rank of Star Scout. His favorite subjects are science and math, and his favorite hobbies are reading, anything connected to computers, riding horses and dirt bikes, and water and snow skiing. **Ross Hansen** is an eighth grader who was born and raised near Portland, Oregon. He enjoys playing computer games and building computers, having LAN parties and, trivia on trips to the beach. In the future, Ross hopes to be a computer geek and earn money with computers. **Zachary Kline**, eighth grader, has been blind since birth. He enjoys activities with no physical component, preferring intellectual contemplation. He has been fascinated by topics such as outer space, the nature of time, etc. When he isn't studying for the science bowl or studying for one of his classes, he enjoys computer games and playing chess with a modified chess board. **Jeff Lewis**, eighth grader, is an avid learner of computer technology, radio-controlled vehicles, and Lego Robotics. He has competed on a winning First Lego League Robotics competition team. He is a Boy Scout, and plans to attend Camp Geronimo in northern Arizona and Philmont, a wilderness ranch in northern New Mexico. **Rebekah Reitmeyer**, eighth grader, has a passion for mathematics and science. Her hobbies include the Dramatic Arts and tutoring aid to younger students. Her dream is to major in architecture.

Jordan Middle School / San Antonio, TX

San Antonio, TX

Left to right: Robert Blount, III, Justin Garcia, Barbara Hart (Coach), Dillon Sather, Christopher Riley

Team Coach: **Barbara Hart** has a Masters of Education from Southwest Texas State University, and a B.S. from Binghamton University. She has been teaching for 18 years and this is her first year at Jordan Middle School. Coach Hart coaches all the Solar Car teams and has also coached Number Sense and calculator teams.

Team Members: **Robert Blount III,** seventh grader, has been in Solar Car for a number of years. He is a member of the National Junior Honor Society and he placed first in Number Sense. He plays soccer for a division one team. He placed fifth at the Milk 3.3 National Soccer Tournament. Rob hopes to go to Duke University. **Justin Garcia**, seventh grader, is a member of the National Junior Honor Society. Justin was on the football and basketball teams, and also ran track. He hopes to go to the University of Texas at Austin. **Chris Riley**, seventh grader, was on the football team for Jordan. He wishes to go to the University of Texas at Austin. **Dillon Sather,** seventh grader, is a member of the National Junior Honor Society. He plays baseball and his team placed first in their division. Dillon hopes to go to the University of Texas at Austin.

NOBCChE Cincinnati / Cincinnati, OH

NOBCChE, Detroit Chapter

Left to right: Oli Ononye, Kayode Omoyosi, Olufemi Taiwo, and Christopher Agomuo

Team Coaches: **Kim D. Jackson g**raduated from Wayne State University in 1995 with a B.S. in Chemistry and University Honors degrees. After joining Procter and Gamble in 1995, she has constantly sought out opportunities to work with young adults (tutoring for proficiency exams, science fair projects, etc.). In her spare time, Kim enjoys gardening, reading, and traveling. **Dr. Ike Ononye** is a researcher at Procter and Gamble, and has taught and coached chemistry and physics at University of Tennessee and in his home country of Nigeria. He has a Ph.D. in Chemistry from University of Western Ontario, Canada and a B.S. in Chemistry from University of Ibadan, Nigeria. He enjoys tennis, piano, and gardening.

Team Members: **Christopher Agomuo** attends Mason Middle School where his favorite subject is science. Chris participates in a tournament winning soccer team and is a member of the track and field team, recently attending the state finals in Ohio. He also enjoys and plays the saxophone. Chris plans to attend college and major in engineering. **Oli Ononye's** favorite subjects are math and science. At the Summit Country Day School, he has participated in the Latin Club, band, and choir. He plays basketball for the school and soccer for a club team. Oli has also volunteered at a nursing home. He plans on going to Xavier University to study engineering and then plans to pursue a Ph.D. at M.I.T. **Kayo Omoyosi's** favorite subjects are science, math, social studies, and English. He is currently vice-president of the student council and he participates in Cello Choir (strings quartet), track, diving, and football. He also volunteers at a nearby soup kitchen. Kayo plans to go to Harvard University to major in law and criminal justice. **Olufemi Taiwo** won the OCTELA Writing Contest for his age group in first grade. In the sixth grade, he wrote an essay on Zero Tolerance in school that won him a Guest Columnist spot in the Cincinnati Enquirer. Olufemi is currently pursuing the creation of a gifted kid's organization. He plans to attend Yale University.

NOBCChE / San Diego, CA

NOBCChE, San Diego Chapter

Left to right: Philip Dabney (Coach), Walter Fairley (Coach), Carla Woodson, Daneshia Slaughter, Dr. Ronald Lewis (coordinator), Jo' Robb Watson, Michael Valentine, Nic Sonderegger (not shown)

Team Coaches: **Philip Dabney** earned his B.A. in Biology from the University of Dayton. He served in the Navy for 22 years as a Surface Naval Officer and has been teaching for seven years as a middle school and high school science teacher. He has done two summer internships in microbiology at the University of California, San Diego. Mr. Dabney has been coaching the San Diego Science Bowl team for three years. He thinks the three most important scientific discoveries are nuclear fission, computers, and DNA. **Walter Fairley** is currently a vice principal at La Jolla High School, the top rated high school in the San Diego Unified School District and a California Distinguished School. He has been in the field of education for twenty-nine years; seventeen years were spent as a history teacher and a wrestling coach. He has coached Science Bowl for the past five years and his Junior Division team won the 2003 NOBCChE National Science Bowl Championship in Indianapolis, Indiana.

Team Members: **Daneshia Slaughter** is a sixth grade student at the Sojourner Truth Learning Academy. She loves to read and write poetry, study science, and play volleyball. She performs in the Sojourner Truth Chorus. Her volunteer work involves keeping her school clean and mentoring other students. She is unsure of her future plans, but she wants to go to college. **Nic Sonderegger** is a sixth grade student at Muirlands Middle School. He competed in the Egg Drop competition in the Science Olympiad. He loves art, surfing, and the beach. He sings with the San Diego Children's Choir and is a first class scout with Troop 500 in Point Loma, California. He would like to be a veterinarian. **Michael Valentine** is a seventh grader at Muirlands Middle School. **Jo' Robb E. Watson** is a seventh grader at Muirlands Middle School. **Carla Woodson** is an eighth grade student at Gompers Secondary School. Her favorite subjects are science, language arts, computers, and history. She speaks French, loves to draw and write, takes care of animals, and enjoys spending time on the computer. She wants to be an actress, singer, or a model.

Roosevelt Middle School / River Forest, IL

Argonne National Laboratory

Left to right: Dan Turcza, Ryan Matos (standing), John Binder, Gavin Schalliol (kneeling)

Team Coach: **Sandra Painter** has been involved with Gifted Education for the last ten years. She attended Indiana University, University of Illinois and Dominican University with endorsements in mathematics, reading, social sciences and Gifted Education. Besides sponsoring Tech Club, she coaches Math Olympiad, Scholastic Bowl and Robotics. Her father was an engineer for all the Apollo missions and was responsible for her interest in math and science. Besides being an avid reader and lover of live music, she also creates geometrical figures through origami. Her three most important scientific discoveries are sequencing the human genome, the computer chip, and of course, solar cars!

Team Members: **John Binder** is in eighth grade, and is involved in Chess Club, track, cross country, Scholastic Bowl, and band. He also works in a peer-mentor program at his school, and has served as band president and librarian. His favorite subject is social studies. John is interested in American history, and wants to be a historical writer. He is also considering law and mathematics. **Ryan Matos**, eighth grader, enjoys math and many sciences. He plays first chair trumpet in his school's symphony, concert band, and jazz band. He received first chair trumpet in the Chicagoland Band Festival and two first-place solo awards on piano and trumpet in a local competition. He enjoys playing tennis, golf, and baseball. He was on the Robotics Team at school and is an avid chess player. Ryan does volunteer work every Sunday at his church. He wants to be a scientist and a business owner when he grows up. **Gavin Schalliol**, eight grader, is involved in track, Chess Club and Scholastic Bowl. He has played piano for over eight years. He enjoys running, playing soccer, and chess. He hopes one day to major in either business or law. **Dan Turcza** has just completed eighth grade. He has taken math and science classes at the local high school, but also enjoys reading and writing. In sixth grade, he won second place in the West 40 writing contest. He plays setter for the eighth grade Volleyball Team and is a member of Roosevelt's Scholastic Bowl team.

South Brunswick Middle School / Boiling Springs Lake, NC

North Carolina EV Challenge

Left to right: Bobby Clemmons, Peter Lloyd, Frank Blackmon (Teacher), Chris Lennon, James Burke

Team Coach: **Carl Frank Blackmon** is a technology teacher at South Brunswick Middle School. He also holds an after school technology club for students to participate in several hands on learning experiences, one of them being the design and building of Junior Solar Sprint cars.

Team Members: **James Burke** is an eighth grader and he was the team captain of the regional quiz bowl. He would like to attend Mississippi State University, his father's alma mater, to become a science professor in astrophysics. James says "I am not necessarily the smartest kid, fact wise, but I can figure out the solution most of the time anyways." **Bobby Clemmons** is a seventh grader who participated in the Junior Solar Sprint for two years. He likes loud rock music and plays the percussion in the school band. Bobby would like to be a car designer, a rock star or a meteorologist one day. **Chris Lennon** attends the seventh grade and his favorite subject is mathematics. He enjoys playing soccer and would like to be a pro soccer player or a software designer in the future. Chris plays the baritone in the school band. **Peter Lloyd** is in seventh grade and he designed the regional winning Junior Solar Sprint car. He likes to play the French horn in the school band and he also likes to play soccer. Peter would like to be an architect one day and he plans to attend N.C. State University.

St. Peter's Lutheran School / Columbus, IN

Indiana SAE JSS

Left to right: Matt Burbrink, Bryce Fathauer, Ben Hodek, Eric Fischer

Team Coaches: **David Burbrink** is the father of four boys and a stepdaughter. He has been active in the Solar Sprint for five years. David is a past Cub Scout leader, a 4-H leader, and is active at church. David enjoys working with kids and teaching outdoor education classes. He operates a real estate appraisal firm and has a BS degree from Purdue University. David and his wife live on a small farm and enjoy travel and family activities. **Karen Sollenberger** teaches science and religion. Karen has been involved with the solar car competition in southern Indiana since 1991. Karen has been teaching junior high for 18 years and enjoys offering a hands-on approach to science. During her free time, Karen enjoys doing activities with her friends, playing cards, going to auctions, gardening and traveling with her husband, who is also a teacher.

Team Members: **Matt Burbrink**, seventh grader, has four brothers and stepsister. Two of Matt's brothers are past state Solar Sprint winners. He is active in Boy Scouts, 4-H, and school. Matt enjoys building things, computer games and living on a farm. **Bryce Fathauer**, seventh grader, has two brothers ages 8 and 5, and will have a 2 year old sister from Russia this summer. He has a Siberian Husky named Kodi and two fish. Bryce's extracurricular activities include reading, playing the piano, golf, soccer, and fixing computers. His favorite sport is basketball, and he plays piano and leads the church band. His favorite subjects are science and math. **Eric Fischer** is a seventh grader whose interests include sports, competitions, video games, hanging out with friends, school and food. "It is a great honor to be selected to go to the 2003 Middle School Science Bowl. I owe much gratitude to my team, and all the other students who helped us in the Solar Car Sprint, as well as my teacher, Karen Sollenberger, and the Cummins engineers, Don Lakin and Keith Dewhirst. **Ben Hodek** is an eighth grader whose interests include drawing comic book characters for his own comic books, playing computer games, building models and playing soccer. This summer, Ben went on a mission trip to Colorado to rebuild a Lutheran Camp burned in wild fires several years ago. He also plans to attend Camp Lakeview and Computer Camp in Chicago.

West Branch Middle School / West Branch, IA

West Branch Middle School

Left to right, front row: Kelsey Hart, Chelsey Pence, Back row, left to right: Adam Donohoe, Greg Wall

Team Coaches: **Jacqui Hart** is West Branch Middle School's Talented and Gifted Coordinator, as well as a parent. **Brent Donohoe** is a parent and coach.

Team Members: **Kelsey Hart** is a sixth grade student who enjoys riding her horse, and playing softball and basketball. **Chelsey Pence** is a sixth grade student who plays softball, basketball and likes to ride her horse in her spare time. **Adam Donohoe** is a sixth grade student who plays basketball, football, and golf in his free time. **Greg Wall** is a sixth grade student who likes to play basketball, football, baseball and spend time on the computer.

National Middle School Science Bowl
Solar Car Race Scorecard

Round 1

2 winners from each heat advance to Round 3, others move to Round 2

Lane	Heat 1	Order of Placing
A		to 7A
B		to 8A
C		to 5A
D		to 6A

Lane	Heat 2	Order of Placing
A		to 7B
B		to 8B
C		to 5B
D		to 6B

Lane	Heat 3	Order of Placing
A		to 7C
B		to 8C
C		to 5C
D		to 6C

Lane	Heat 4	Order of Placing
A		to 7D
B		to 8D
C		to 5D
D		to 6D

Round 2 - 1 loss

2 winners from each heat advance to Round 4

Lane	Heat 5	Order of Placing
A		to 10B
B		to 9B
C		
D		

Lane	Heat 6	Order of Placing
A		to 9C
B		to 10C
C		
D		

Round 3 - 0 losses

2 winners from each heat advance to Round 5, others move to Round 4

Lane	Heat 7	Order of Placing
A		to 11A
B		to 11C
C		to 9A
D		to 10A

Lane	Heat 8	Order of Placing
A		to 11B
B		to 11D
C		to 10D
D		to 9D

Round 4 - 1 loss

2 winners from each heat advance to Round 6

Lane	Heat 9	Order of Placing
A		to 13A
B		to 12A
C		
D		

Lane	Heat 10	Order of Placing
A		to 12B
B		to 13B
C		
D		

Round 5 - 0 losses

2 winners advance to FINAL, others move to Round 6

Lane	Heat 11	Order of Placing
A		to 14B
B		to 14D
C		to 12C
D		to 13C

Round 6 - 1 loss

1 winner from each heat advances to FINAL

Lane	Heat 12	Order of Placing
A		to 14C
B		
C		

Lane	Heat 13	Order of Placing
A		to 14A
B		
C		

FINAL

2nd place must have lost twice, so a second FINAL round between top two finishers may be neccesary

Lane	Heat 14	Order of Placing
A		to 15A (if necessary)
B		to 15B (if necessary)
C		3rd Place
D		4th Place

FINAL Round 2

Lane	Heat 15	Order of Placing
A		1st Place
B		2nd Place

2003 NATIONAL MIDDLE SCHOOL SCIENCE BOWL
ROUND ROBIN SCHEDULE

EINSTEIN DIVISION — EIGHT (8) TEAMS

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 8:30 A.M	1 VS 2	AH151	3 VS 4	AH152	5 VS 6	AH134	7 VS 8	AH141
2 9:00 A.M.	1 VS 3	AH141	2 VS 4	AH151	5 VS 7	AH152	6 VS 8	AH134
3 9:30 A.M.	1 VS 4	AH134	2 VS 3	AH141	6 VS 7	AH151	5 VS 8	AH152
10:00 A.M.	BREAK							
4 10:30 A.M.	1 VS 5	AH352	2 VS 6	AH340	3 VS 7	AH330	4 VS 8	AH162
5 11:00 A.M.	1 VS 6	AH162	2 VS 5	AH352	4 VS 7	AH340	3 VS 8	AH330
6 11:30 A.M.	1 VS 7	AH330	3 VS 5	AH162	4 VS 6	AH352	2 VS 8	AH340
7 12:00 NOON	2 VS 7	AH340	3 VS 6	AH330	4 VS 5	AH162	1 VS 8	AH352

12:30 P.M.	ASSEMBLE IN THE ALDERSON HALL FOYER AREA TO DETERMINE IF TIEBREAKS ARE NECESSARY
1:15 P.M.	ASSEMBLE IN THE STUDENT CENTER DINING ROOM TO DRAW FOR POSITION IN SINGLE ELIMINATION TOURNAMENT
2:00 P.M.	EIGHT (8) TEAM SINGLE ELIMINATION BEGINS

2003 NATIONAL MIDDLE SCHOOL SCIENCE BOWL
ROUND ROBIN SCORE SHEET

EINSTEIN DIVISION — EIGHT (8) TEAMS

TEAM	1	2	3	4	5	6	7	8	TOTAL POINTS
1									
2									
3									
4									
5									
6									
7									
8									

2003 NATIONAL MIDDLE SCHOOL SCIENCE BOWL
ROUND ROBIN SCHEDULE

NEWTON DIVISION — EIGHT (8) TEAMS

ROUND	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM	TEAMS	ROOM
1 8:30 A.M	9 VS 10	AH162	11 VS 12	AH352	13 VS 14	AH340	15 VS 16	AH330
2 9:00 A.M.	9 VS 11	AH330	10 VS 12	AH162	13 VS 15	AH352	14 VS 16	AH340
3 9:30 A.M.	9 VS 12	AH340	10 VS 11	AH330	14 VS 15	AH162	13 VS 16	AH352
10:00 A.M.	BREAK							
4 10:30 A.M.	9 VS 13	AH152	10 VS 14	AH134	11 VS 15	AH141	12 VS 16	AH151
5 11:00 A.M.	9 VS 14	AH151	10 VS 13	AH152	12 VS 15	AH134	11 VS 16	AH141
6 11:30 A.M.	9 VS 15	AH141	11 VS 13	AH151	12 VS 14	AH152	10 VS 16	AH134
7 12:00 NOON	10 VS 15	AH134	11 VS 14	AH141	12 VS 13	AH151	9 VS 16	AH152

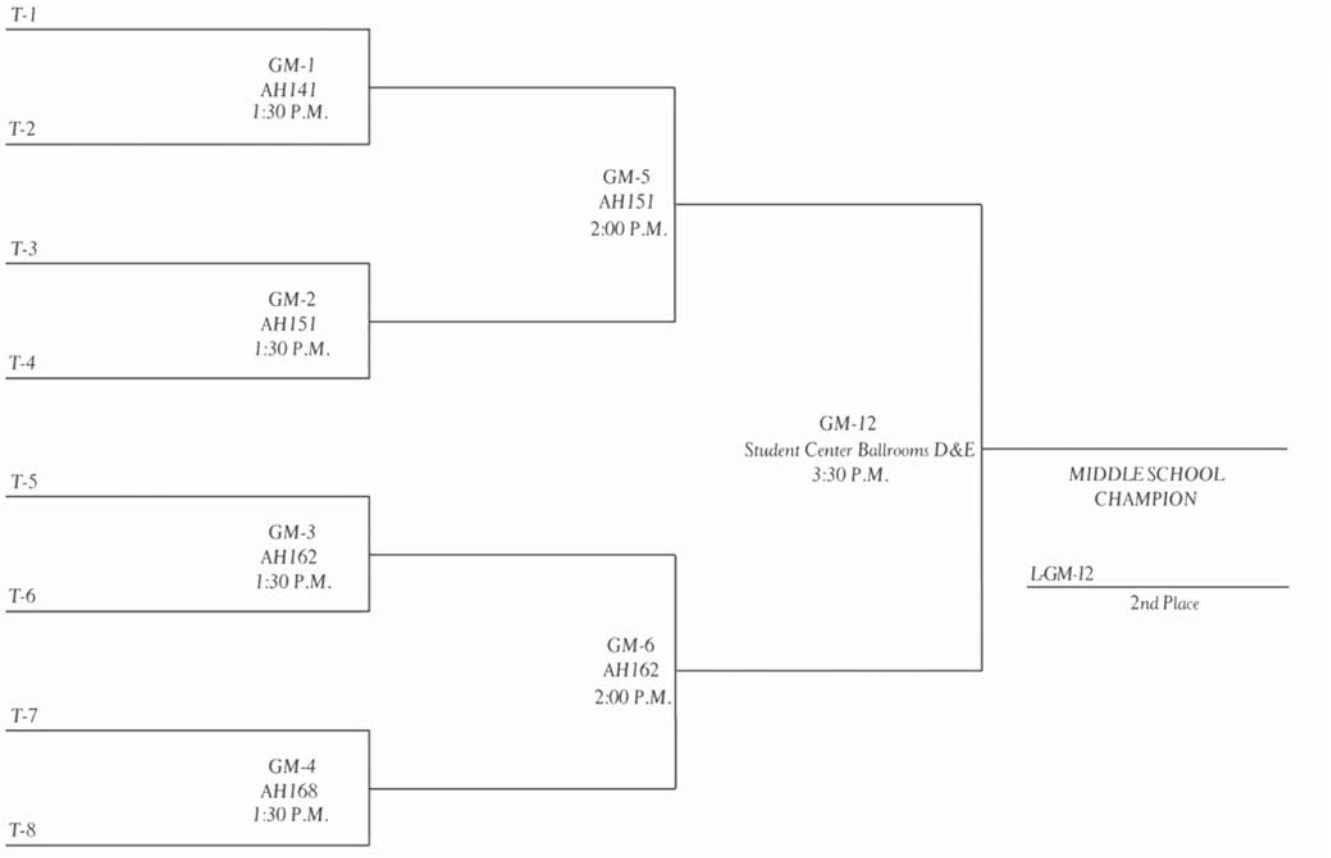
12:30 P.M.	ASSEMBLE IN THE ALDERSON HALL FOYER AREA TO DETERMINE IF TIEBREAKS ARE NECESSARY
1:15 P.M.	ASSEMBLE IN THE STUDENT CENTER DINING ROOM TO DRAW FOR POSITION IN SINGLE ELIMINATION TOURNAMENT
2:00 P.M.	EIGHT (8) TEAM SINGLE ELIMINATION BEGINS

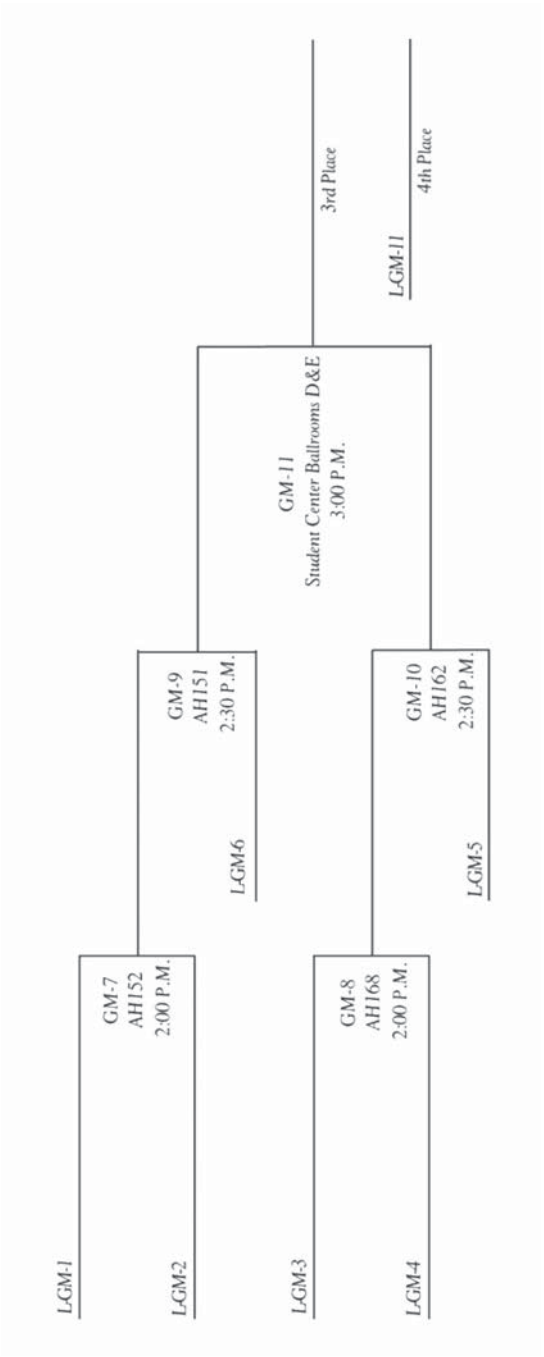
2003 NATIONAL MIDDLE SCHOOL SCIENCE BOWL
ROUND ROBIN SCORE SHEET

NEWTON DIVISION — EIGHT (8) TEAMS

TEAM	9	10	11	12	13	14	15	16	TOTAL POINTS
9									
10									
11									
12									
13									
14									
15									
16									

2003 National Middle School Science Bowl
Academic Competition — Final Rounds
Single Elimination




LGM-1
GM-7
AH152
2:00 P.M.
LGM-2
LGM-3
GM-8
AH168
2:00 P.M.
LGM-4
LGM-6
GM-9
AH151
2:30 P.M.
LGM-5
GM-10
AH162
2:30 P.M.
GM-11
Student Center Ballrooms D&E
3:00 P.M.
LGM-11
3rd Place
4th Place

2003 National Middle School Science Bowl
Results Tally Sheet

Solar Car Race

Champion _____

2nd Place _____

3rd Place _____

4th Place _____

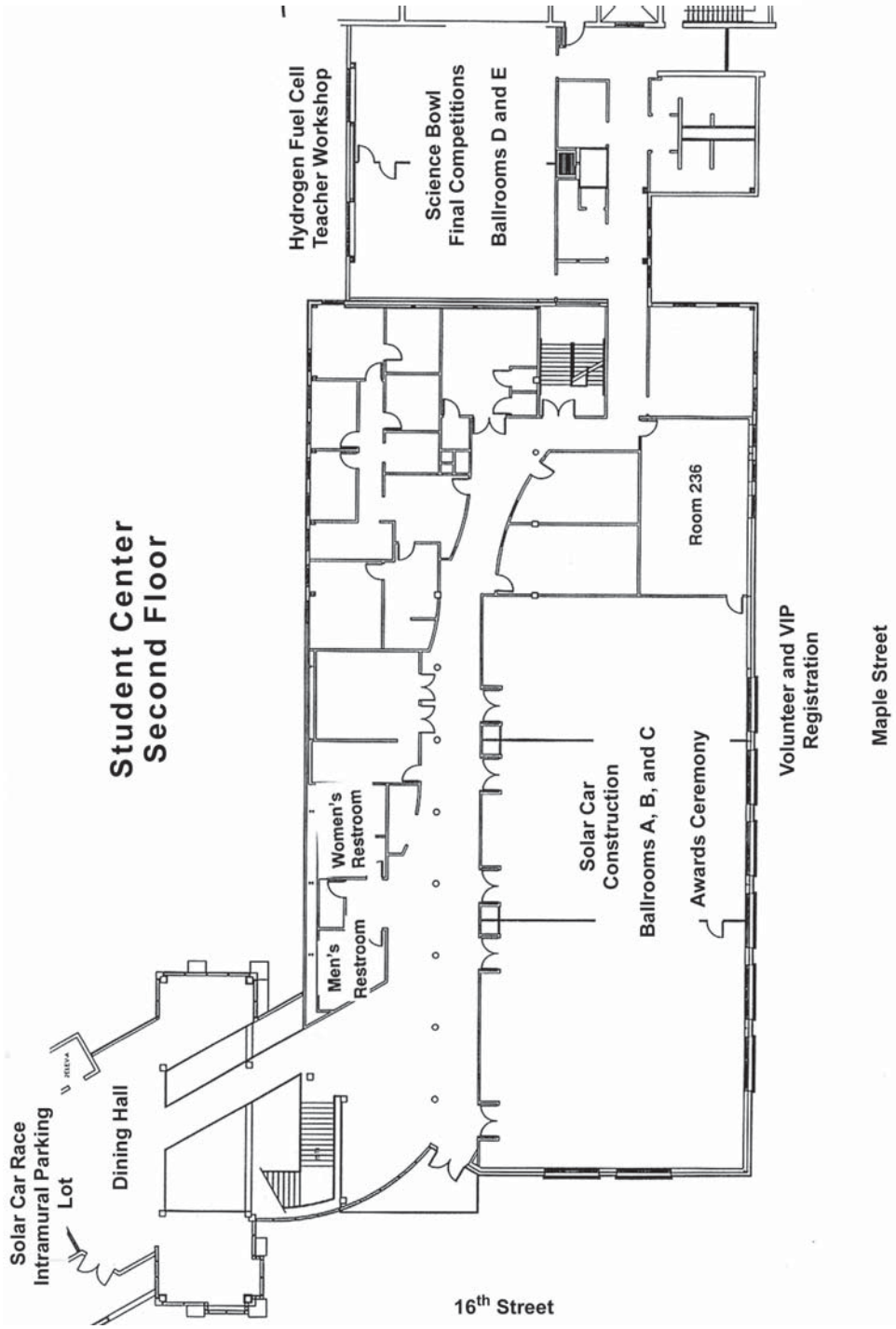
Academic Competition

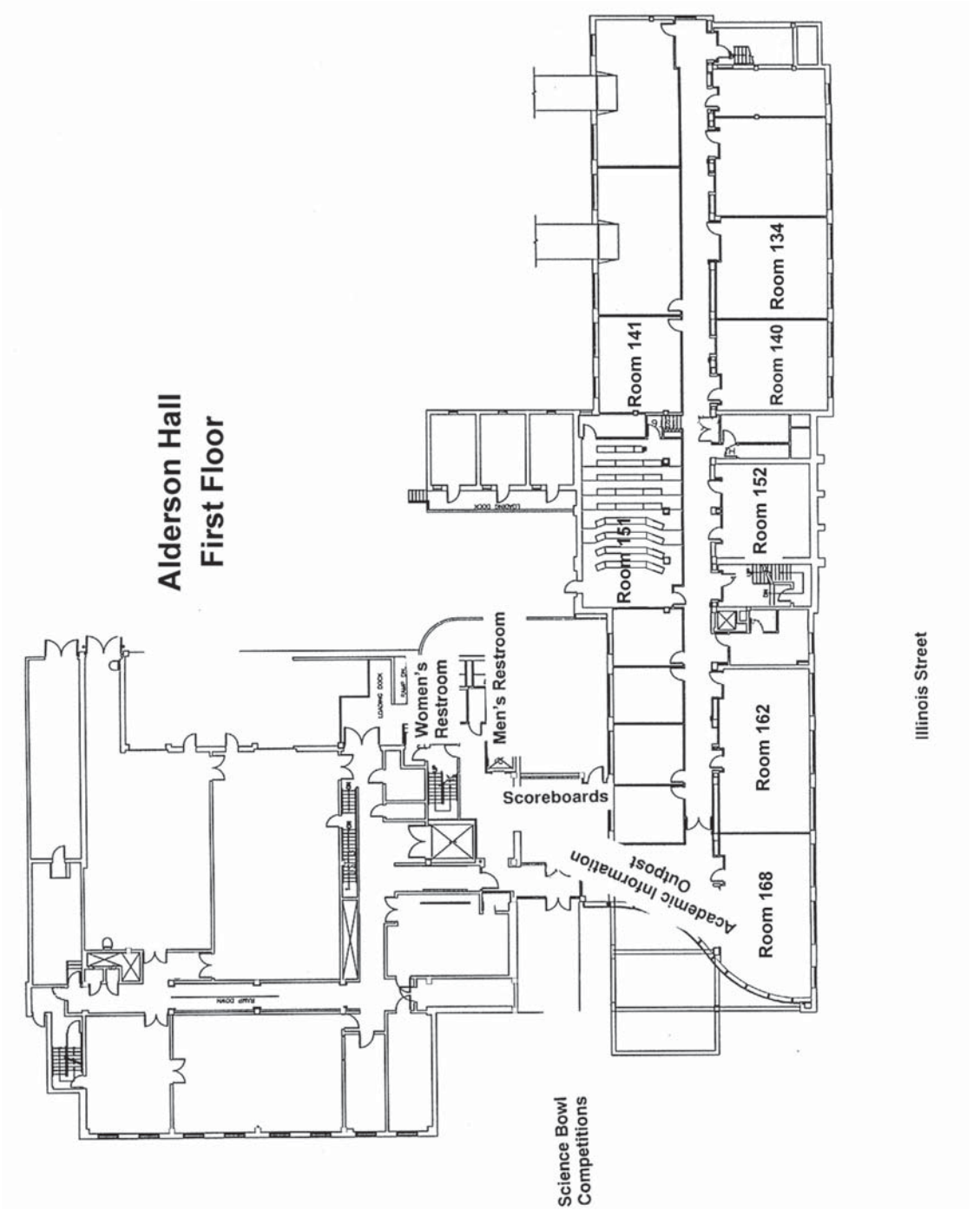
Champion _____

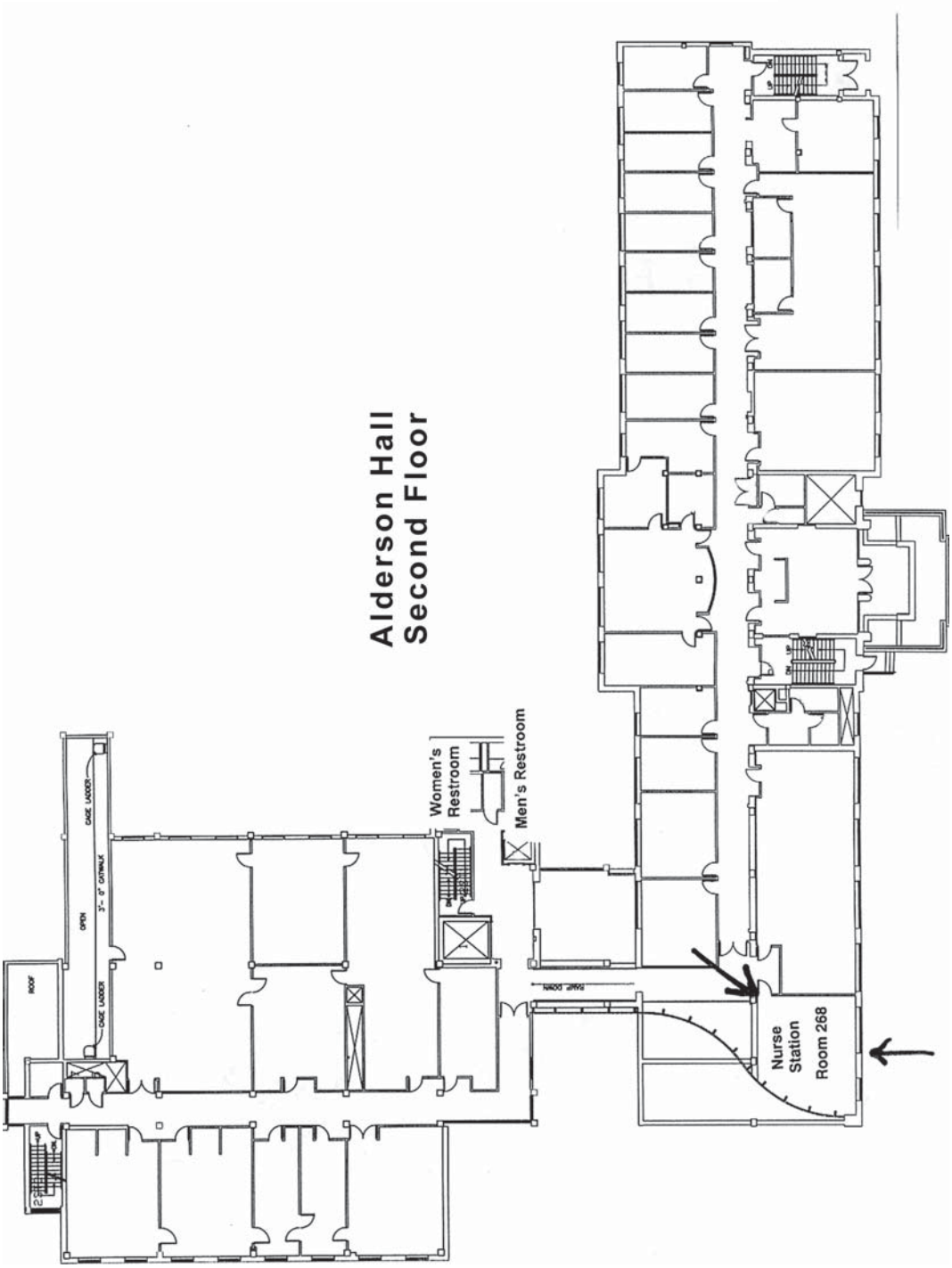
2nd Place _____

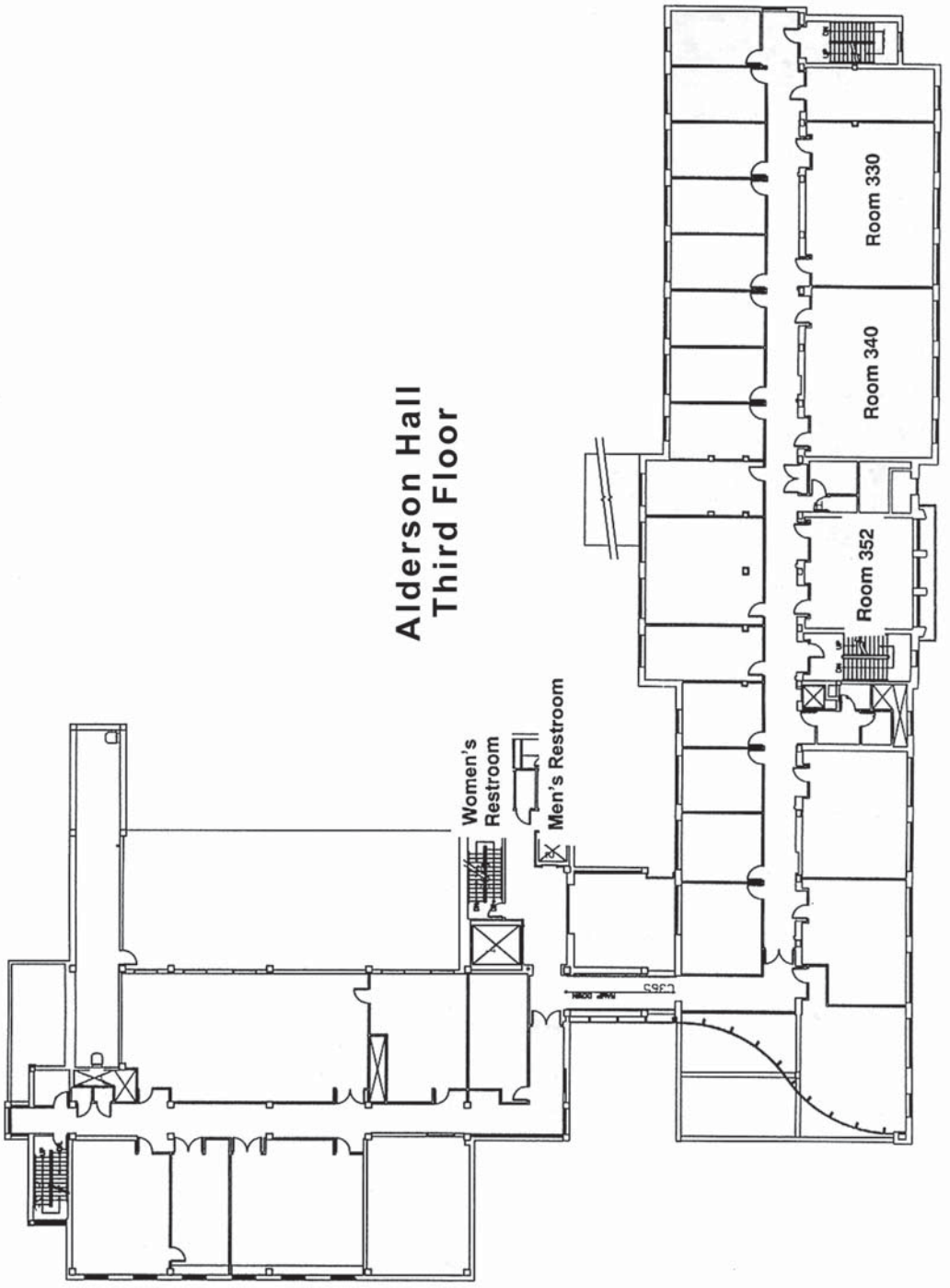
3rd Place _____

4th Place _____


Student Center
Second Floor
Hydrogen Fuel Cell
Teacher Workshop
Science Bowl
Final Competitions
Ballrooms D and E
Room 236
Volunteer and VIP
Registration
Maple Street
Women's
Restroom
Men's
Restroom
Solar Car
Construction
Ballrooms A, B, and C
Awards Ceremony
Dining Hall
Solar Car Race
Intramural Parking
Lot
16th Street


Alderson Hall
First Floor
Room 141
Room 134
Room 140
Room 152
Room 151
Room 162
Room 168
Women's Restroom
Men's Restroom
Scoreboards
Academic Information Outpost
Science Bowl Competitions
Illinois Street


Alderson Hall
Second Floor
Women's Restroom
Men's Restroom
Nurse Station
Room 268
ROOF
OPEN
CAGE LADDER
3'- 0" CATWALK
CAGE LADDER


Alderson Hall
Third Floor
Room 330
Room 340
Room 352
Women's Restroom
Men's Restroom

ACKNOWLEDGMENTS
2003 Middle School Science Bowl

VOLUNTEERS

Jeff Alleman
Karl Andreasen
Chris Auriemma
Julie Baxes
Gunjit Bir
Bobby Blount
Andrew Boone
Joe Bozell
Bradley Brennan
Darlene Brenner
Lindsey Buehler
Joseph Bullock
Michele Buzek
Todd Clark
Jeremy Cook
Matthew Dabney
Mark Davis
Serge Delak
Steve Deutch
George Douglas
Matthew Dubrovich
Linda Esposito
Peter Faletra
Kale Franz
Erik Garnett
Dave Ginley
Warren Gretz
Penny Hall
Rebecca Hall
Debra Halliday
Bonnie Hames
Danielle Hansgen
Karen Harrell
Fred Hartline
Eric Hass
Chris Hilleary
Doug Hooker
Cara Horbacewicz
John Horst
Jayne Howard
Rick Howard
Cynthia Howell
Susan Huang
Hector Ibarra
Alexander Israel
Lynn Jeka
Kaye Kamp
Matt Kuhn
Kathryn Lee
Kelly Lichter
Debby Luchsinger
Linda Lung
Frank Maldonado
David McCollum
Jonathan Meuser
Eduardo Moutinho
Cindy Musick
Patrisia Navarro
Brad Neu
James O'Dea
Gabe Olchin
Phil Parilla
Nancy Pejouhy
Chris Powers
Jennifer Pratt
Michelle Rathbun
Steve Rapp
Emily Reith
Nancy Rose
Monica Samec
Wilbur Sameshima
Gary Schmitz
Melinda Schroeder
Don Selmarten
Thomas Sherow
Vince Shielack
Rick Shin
Daniel Steever
Kevin Sweeney
Anna Talamantez
Amy Tapia

VOLUNTEERS

Kirsten Trujillo
Brittany Walker
Walton Ward
Mark Wehrenberg
Kristy Wellins
Jim Williamson
Sam Wilson
Rick Winter
Ben Zwissler

ACKNOWLEDGMENTS
2003 Middle School Science Bowl
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Coordinator: Garvin Wattuhewa

Sponsors:

Alabama School of Mathematics and Science

Alabama School of School of Mathematics Foundation

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Coordinator: Fred Hartline

Science Bowl Committee:

Harold Myron

Deon Ettinger

Christine McGee

Sponsors:

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Argonne National Laboratory

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Coordinators: Susan Schleith, Penny Hall

Science Bowl Committee:

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Diane Flowers

Paul Semeraro

Alison Hall

Dustin Schubert

Kelli Van Dusen

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INDIANA SAE JSS

Coordinator: Ben Zwissler

Science Bowl Committee:

Glen Haegele

Keith Dewhirst

Donna Virnig

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Sue Brasmer

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David Ginley
Jeff Alleman
Bill Marion
Doug Hooker
Julie Baxes
Sarah Barba

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Coordinator: Jayne Howard

Science Bowl Committee:

Richard Howard (JSS)
Jon Mauney (Quiz Bowl)

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EV Challenge
Environmental Protection Agency

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Coordinator: Keith B. Williams

Science Bowl Committee:

Darryl Gardner
Sonya Gargies
Renilius Bell
Kimberly Jackson
Tamiika Hurst
Johnny Butler
Celeste Worsham
Dirkland Williams
Rashad Simmons
Sandra Parker
Zimbria Bibb
Priscilla Morris

Sponsors:

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NOBCChE (Univ. of Michigan)
NOBCChE (Michigan State Univ.)
NOBCChE (Wayne State Univ.)
NOBCChE (Midland)
NOBCChE (Cincinnati)
IEEE (Wayne State Univ.)
Wayne State University (College of Science)
Wayne State University (Dept. of Chemistry)

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Science Bowl Committee:
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Rashad Sims
Celeste Tyus
Brenda Brown
Shirley Hall
Cassandra Countryman
Dr. Estralita Martin
Jim Tucker
Zakiya Williams
Harold Williams

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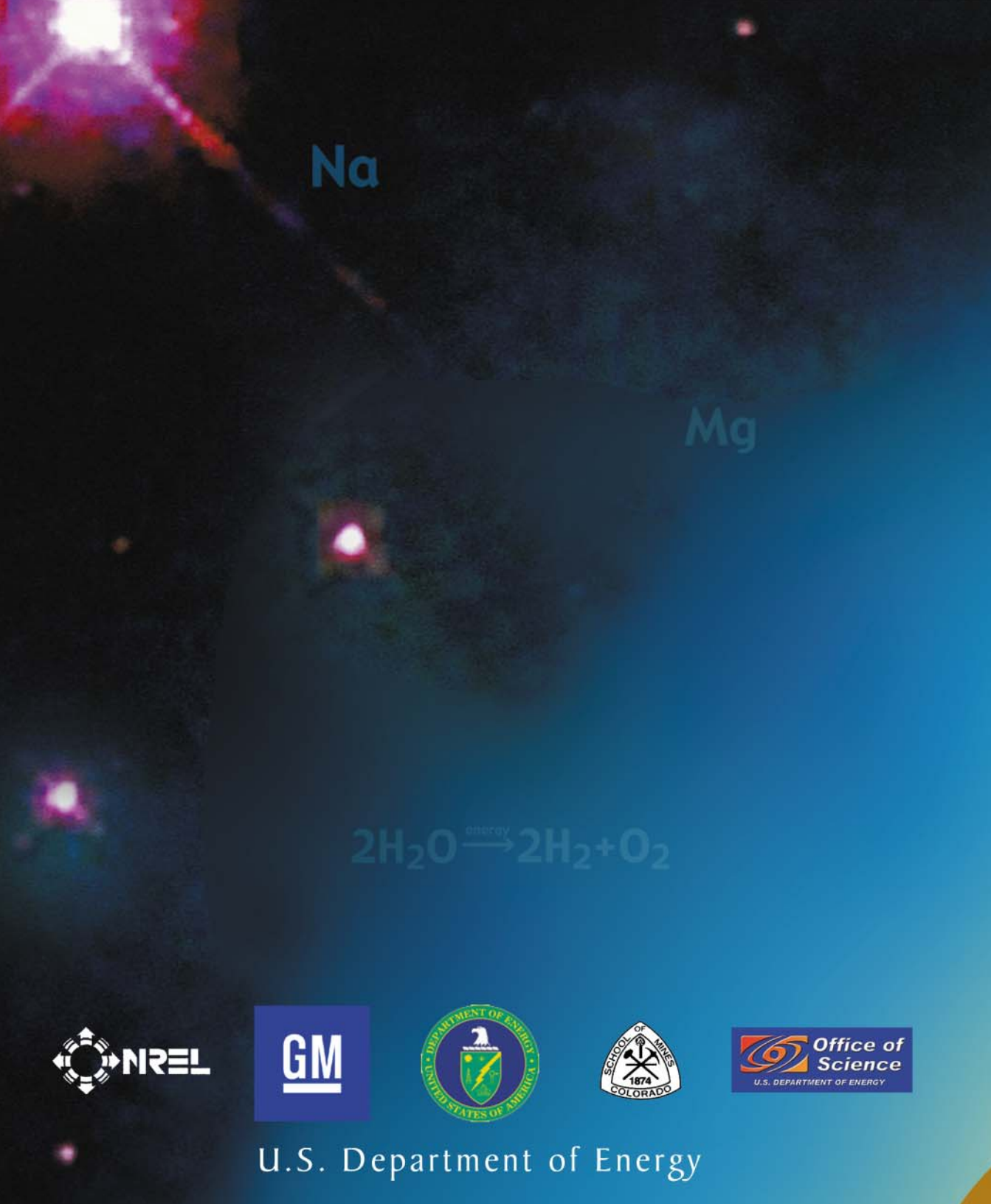

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